

MARINA A GUIRGUIS
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MARINA A GUIRGUIS

guirguis.m@husky.neu.edu

(402) 769-9060

23048 Gray Ave, Port Charlotte FL, 33980

EDUCATION

Master of Design, Sustainable Urban Environments,
Northeastern University, Boston, Massachusetts (MA), United States, May 2017

Bachelor of Science, Architectural Engineering (Magna Cum Laude),
The American University in Cairo (AUC), Egypt, June 2016

American High School Diploma,
Schutz American School (SAS), Alexandria, Egypt, June 2010

SKILLS

Computer

AutoCAD
ArcMap GIS
Revit
Lumion
Rhino
Photoshop
Illustrator
Microsoft Office

Manual

Drawing
Painting
Model Making

Language

English
Colloquial Arabic

WORK EXPERIENCE

Research Assistant, September 2016 - May 2017

Office of Graduate and Global Co-op, College of Art, Media and Design,
Northeastern University, Boston, MA

Sales Associate & Ringer, July 2016 – Current

Macy's, Boston, MA

President, May 2015 – June 2016

Architecture Association (AA), Department of Architecture, AUC, Egypt

Leadership Award presented by the Chairman of the Department of Architecture, AUC, Egypt, May 2016

Teacher's Assistant (TA), Department of Architecture, AUC, Egypt

Coptic Art and Architecture, February 2015 – May 2016,

Human Aspects in Architectural Design, February 2014 – May 2014,

Digital Representation Tools for Architects, February 2013 – May 2013

Internships

Dezines: Dalia Sadany, Mohandeseen, Cairo, Egypt, February 2015,

Manoli Builders Inc., Honolulu, Hawaii, August 2014,

Scientific Center for Architecture, Landscaping and Environmental
Planning (SCALE), Cairo, Egypt, January 2014 and January 2015

Volunteer, March 2014, Department of Architecture, AUC, Egypt

Union of International Architects (UIA) Exhibition,

Presenter, May 2012, AUC, Egypt

Excellence in Undergraduate Research, Entrepreneurship and
Creative Achievement (EURECA) Conference

GREEN INFRASTRUCTURE: Stormwater Management BOSTON, MA

Using the existing Olmsted Green neighborhood, rainfall collection and drainage calculations were conducted to determine the most appropriate design and layout of different methods of green stormwater management systems. Cross-sectional design area and lengths are according to the calculated volume for at least 95% collection per system. The design was then manifested and rendered on Rhino with additional details added on Photoshop.



- Wetland
- Backyard Meandering Bioswale
- Street Island Bioswale
- Roadside Bioswale
- Crosswalk Basin

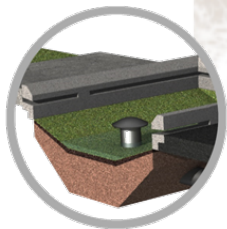
Roadside Bioswale



Bio-Retention Swale

Mulch

Bio-Retention Soil

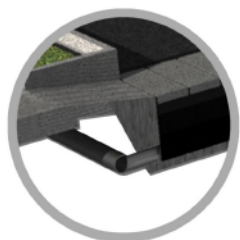


Emergency Drainage Pipe

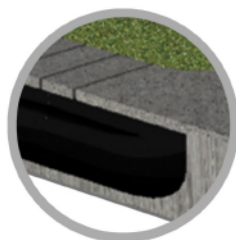
Street Island Bioswale



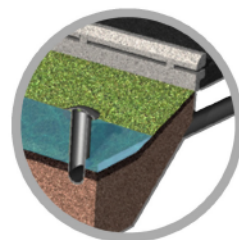
Street Island Bioswale



Drainage connection to waterproof membrane-covered basin extending the path of the crosswalk



Cement boards resting on solid concrete structure containing crosswalk basin



Emergency drainage pipe leading directly to meandering bioswale and wetlands

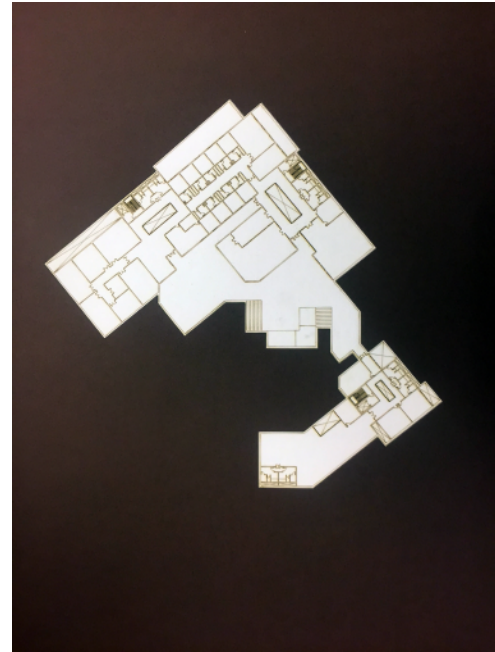
WOMEN'S EMPOWERMENT CENTER HELWAN, EGYPT

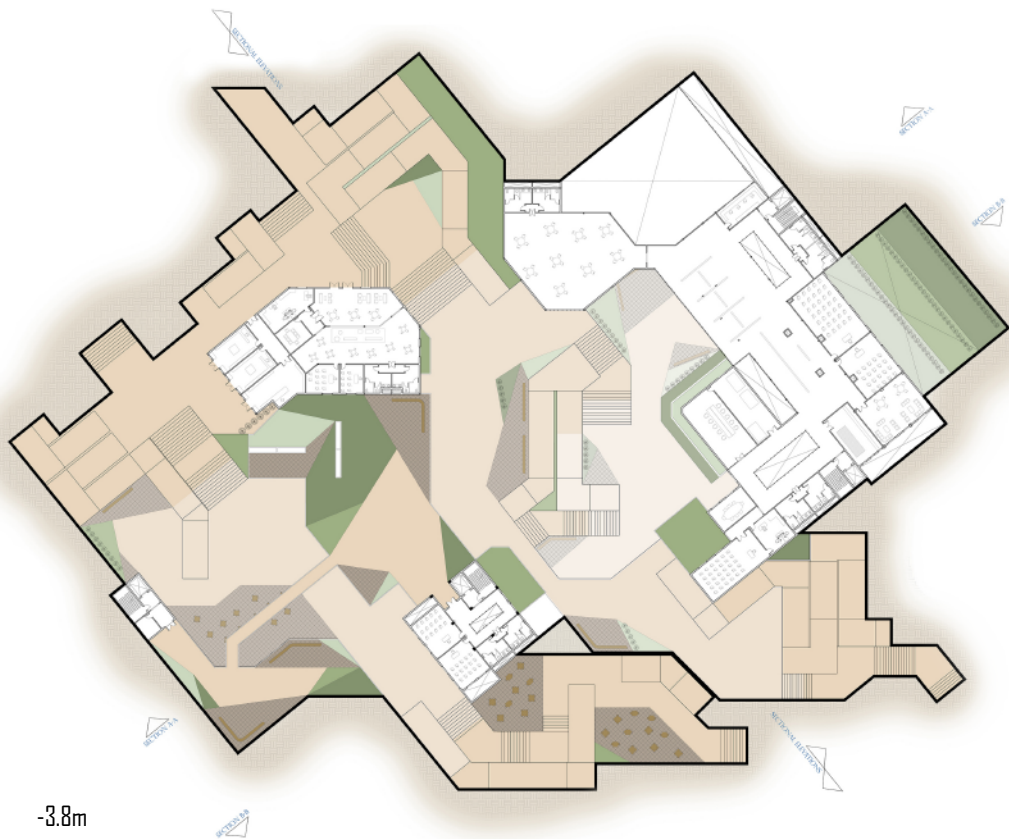
Upon thorough site analysis of the industry-dependent city of Helwan, five projects were presented to balance the identity crisis present under six main categories: re-branding, health, awareness, career opportunities, industry and research. The following project tackles awareness and career opportunities; a community-driven design intended for a neglected social group; the wives of low-income factory workers.

Aiming to create a safe-haven for women reflecting the transparency of the building functions in relation to the studied problems, an introverted, underground structure was designed for this year-long undergraduate thesis project. To maintain respect for the culture of the people in the surrounding residences, a community axis is included in parallel with visual corridors to allow for the project's acceptance by the male population and respecting the women's privacy. The play on levels reflects the transparency in the building program, allowing access due to the relationships between the solved functions. The final images shown here depict the layered lasercut model and plans, created on Revit and lightly rendered on Adobe Photoshop.

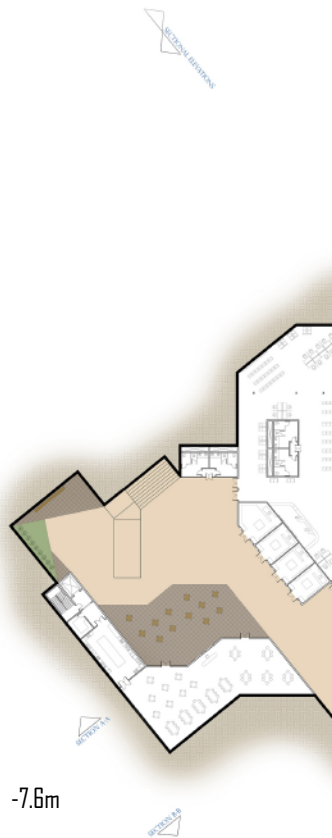


Increasing levels of awareness through healthy urban living to empower women;
Connecting education with the community and expanding their economic potentials to
improve their living conditions through a transparent program and design.

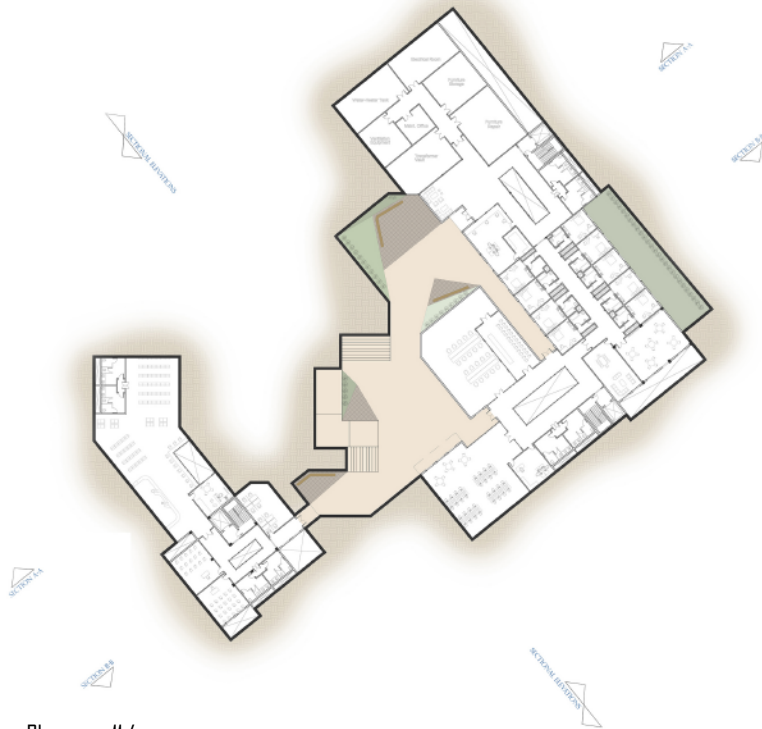




Plan -3.8m



Plan -7.6m

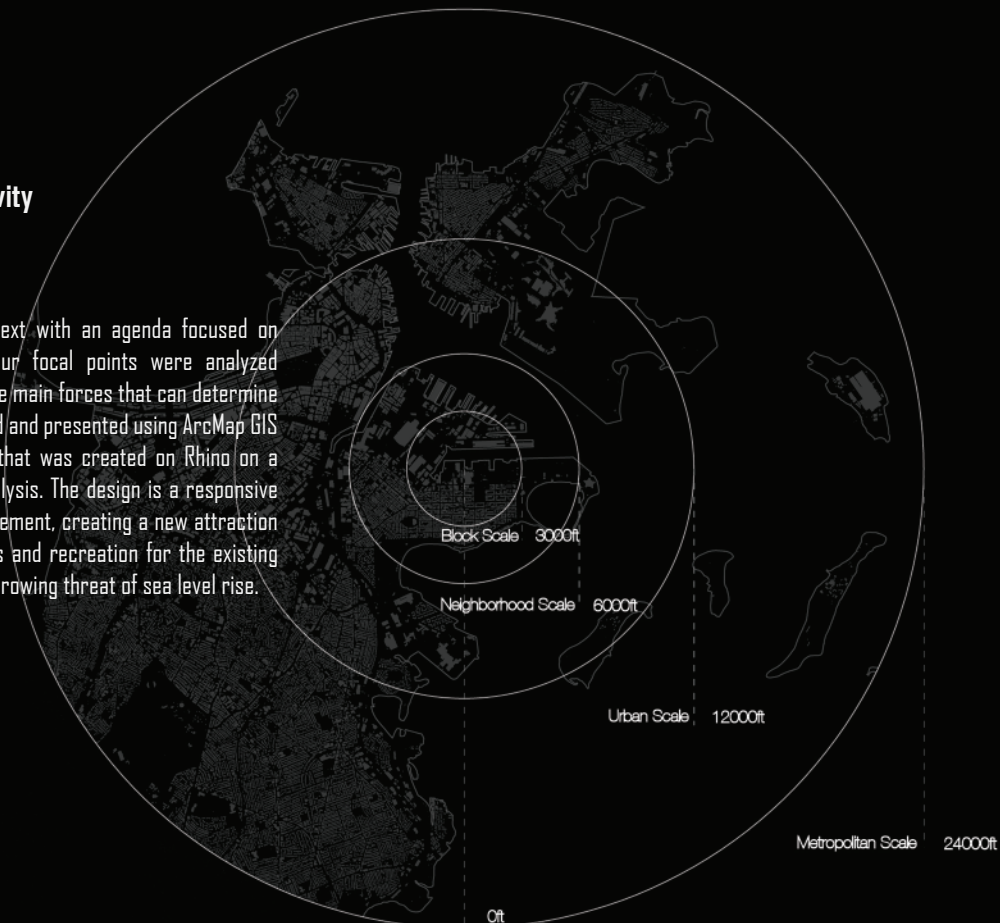


Plan -11.4m

HELPING URBAN BOSTON:

Modifying Sea Level Rise Through Connectivity BOSTON, MASSACHUSETTS

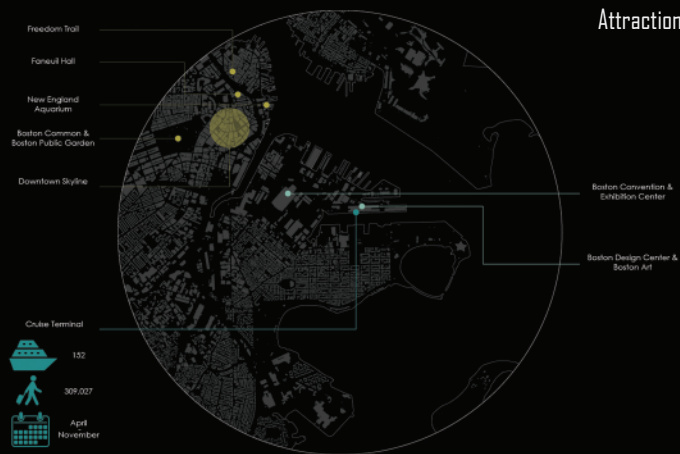
A selected site in South Boston was studied in context with an agenda focused on connection, attraction, activity and water. These four focal points were analyzed according to four corresponding scales to determine the main forces that can determine a design on the constraints of the site. Data was gathered and presented using ArcMap GIS and Illustrator. The design is a morphed topography that was created on Rhino on a portion of the site with the highest potential after analysis. The design is a responsive landscape built on the essence of connectivity and movement, creating a new attraction for tourists to South Boston, spaces for new activities and recreation for the existing community, all designed with (rather than against) the growing threat of sea level rise.



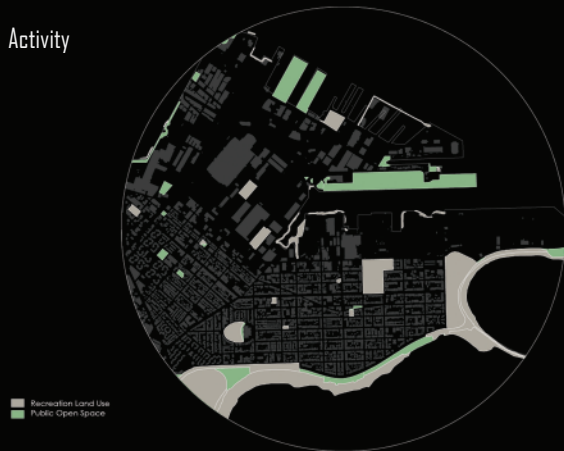
Connection



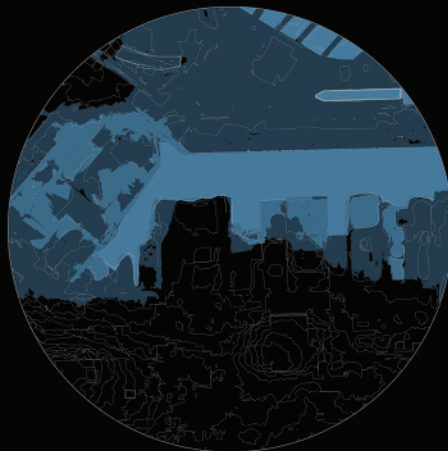
Attraction



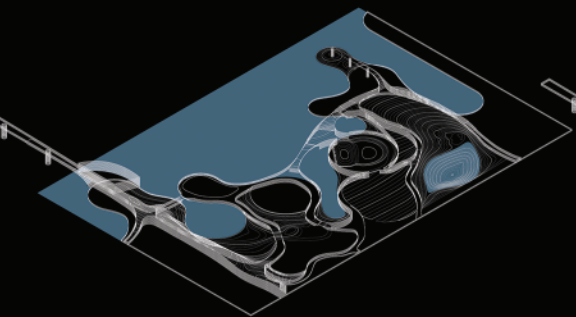
Activity



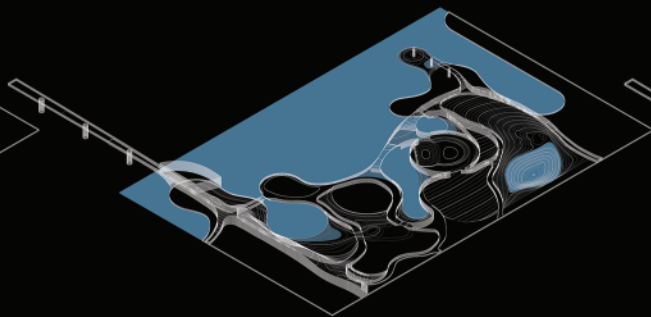
Water



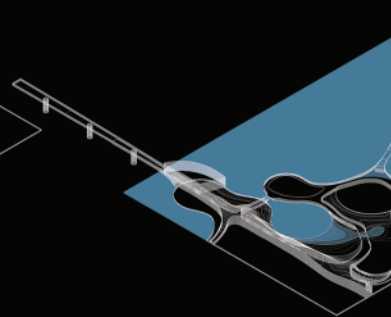
Designed Sea Level Rise



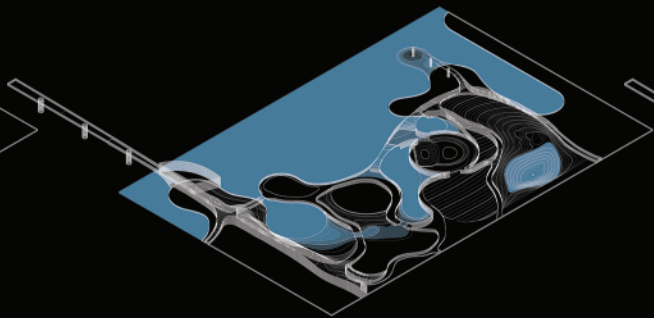
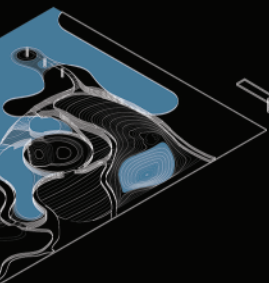
0 ft



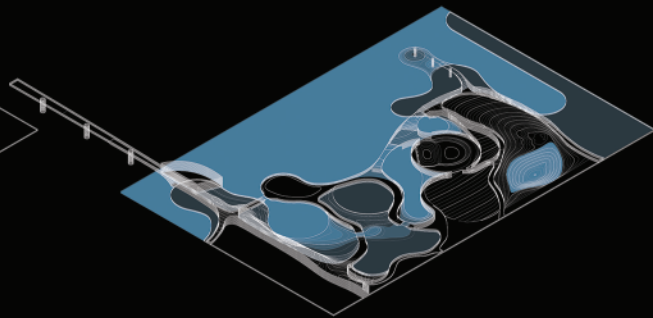
2.5 ft



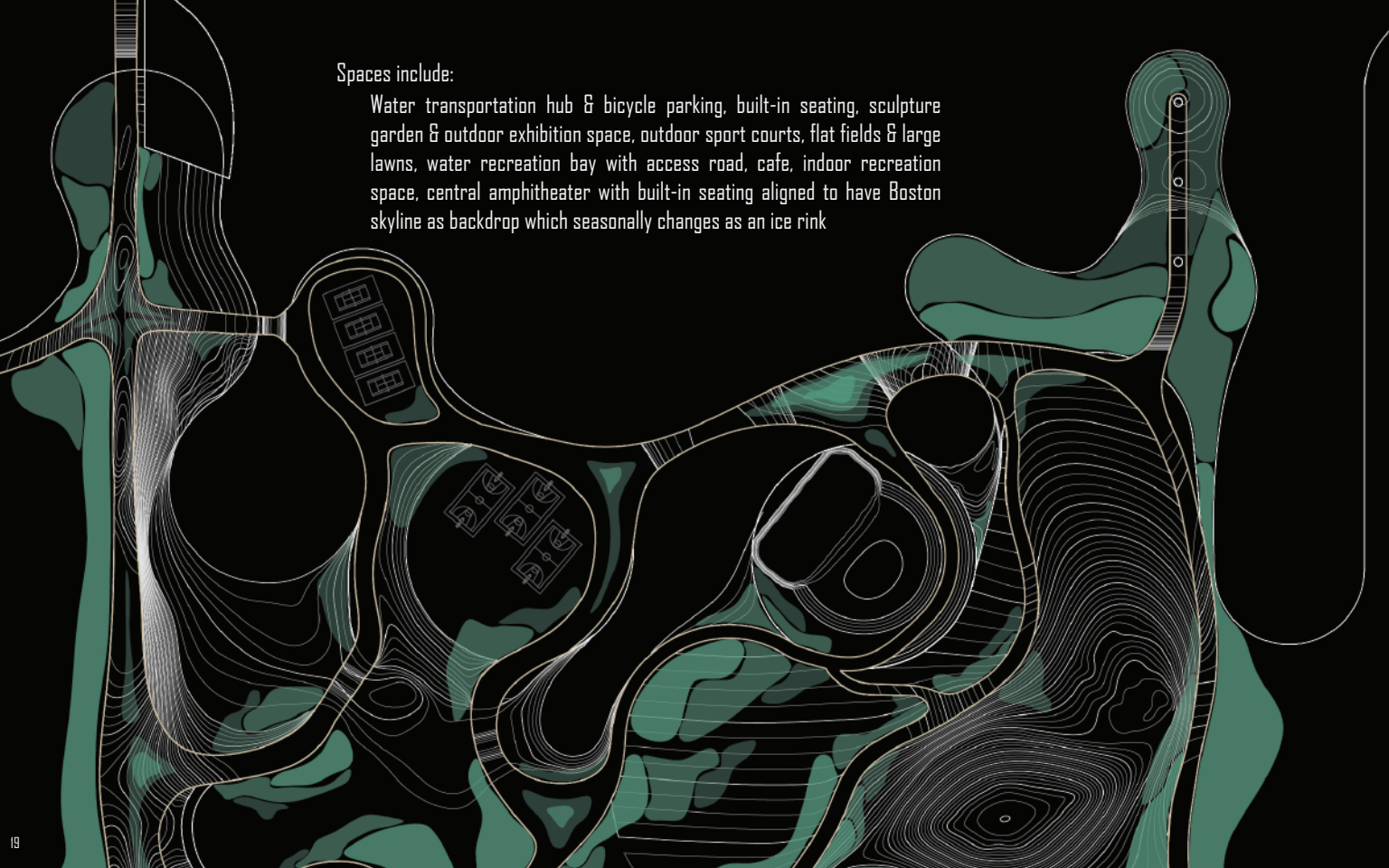
5.0 ft



7.5 ft

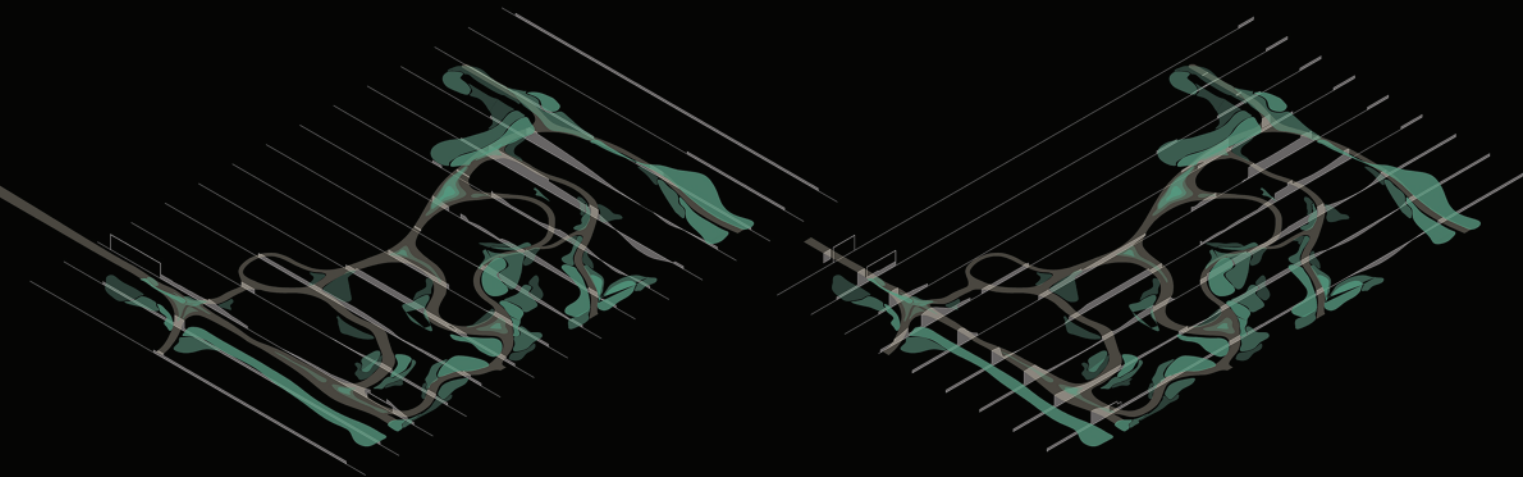


10.0 ft



Spaces include:

Water transportation hub & bicycle parking, built-in seating, sculpture garden & outdoor exhibition space, outdoor sport courts, flat fields & large lawns, water recreation bay with access road, cafe, indoor recreation space, central amphitheater with built-in seating aligned to have Boston skyline as backdrop which seasonally changes as an ice rink

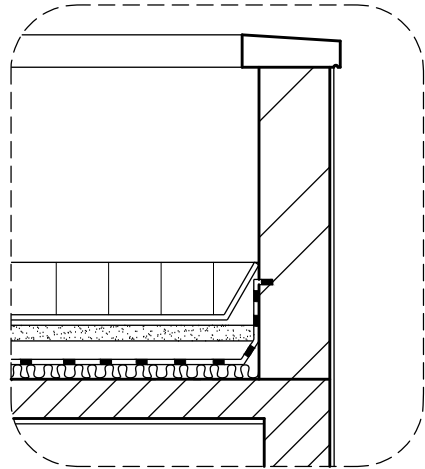


Vegetation and walkway across topography displayed through consecutive cross-sections.

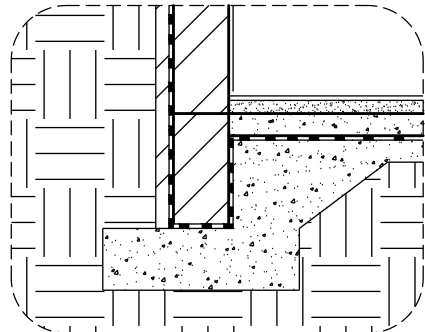
DETAIL DRAWINGS & CONSTRUCTION DOCUMENTS

CAIRO, EGYPT

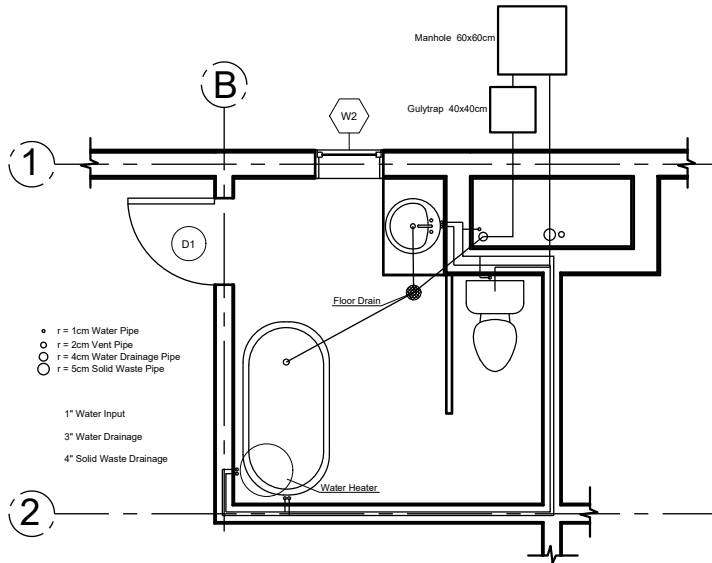
The following detailed drawings and construction documents were created for a villa designed for a required studio course. The full project was created in detail on Revit, including various call-outs and schedules, and then exported and edited more on AutoCAD for lineweights. This excerpt of the project includes blow-up details of the bathroom and call-out details of the roof parapet and the foundation.



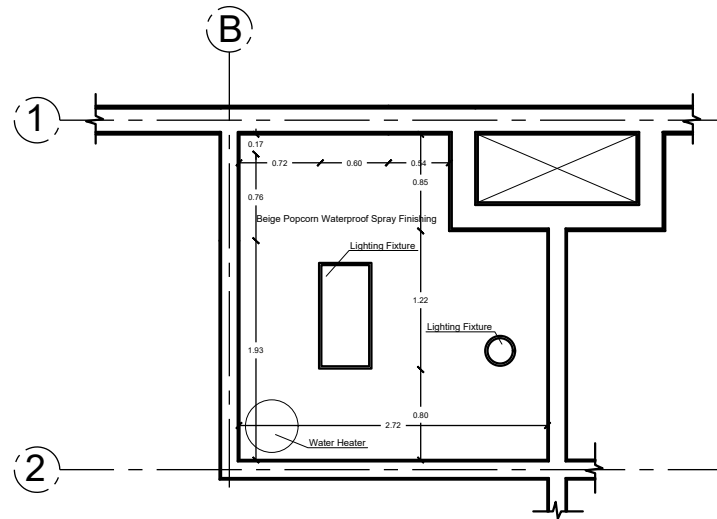
Roof Parapet Detail



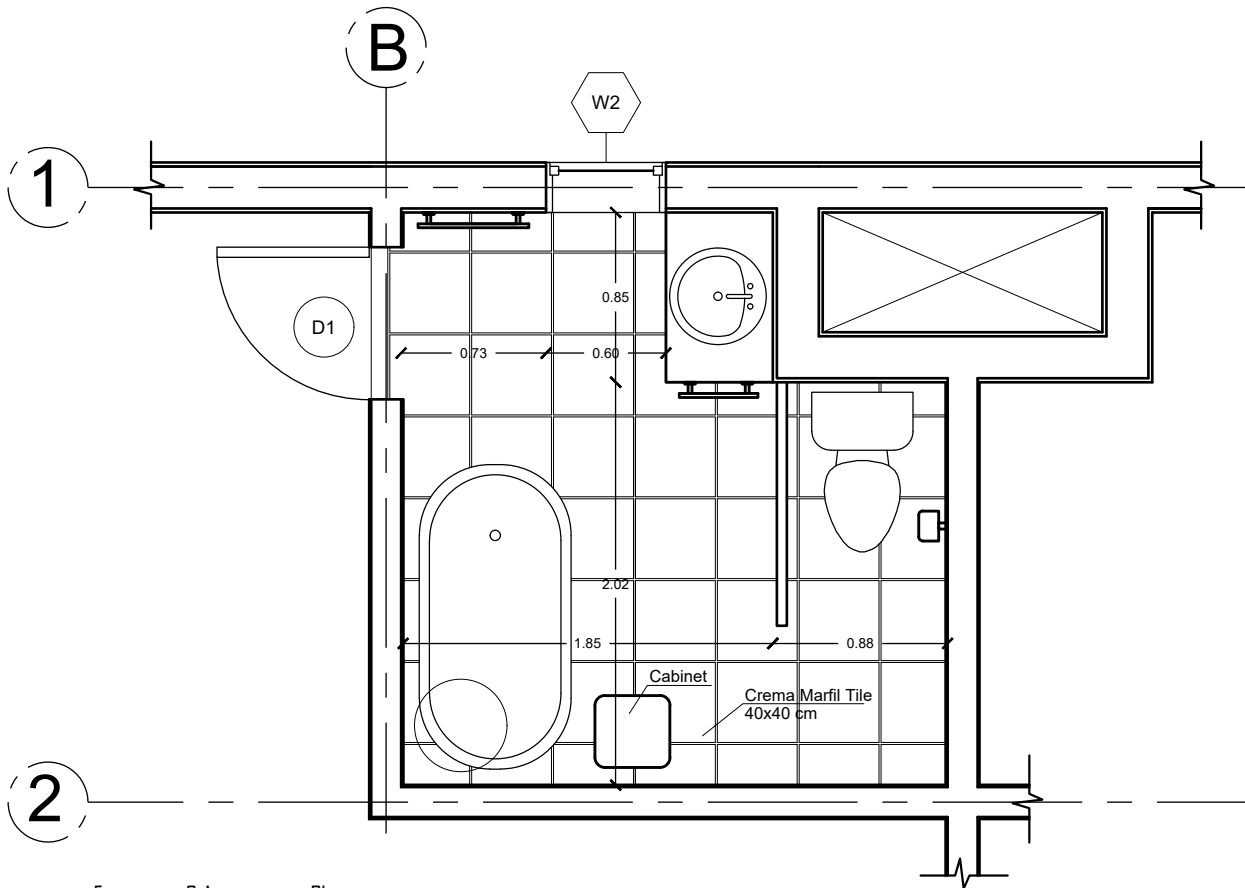
Foundation & Ground Detail



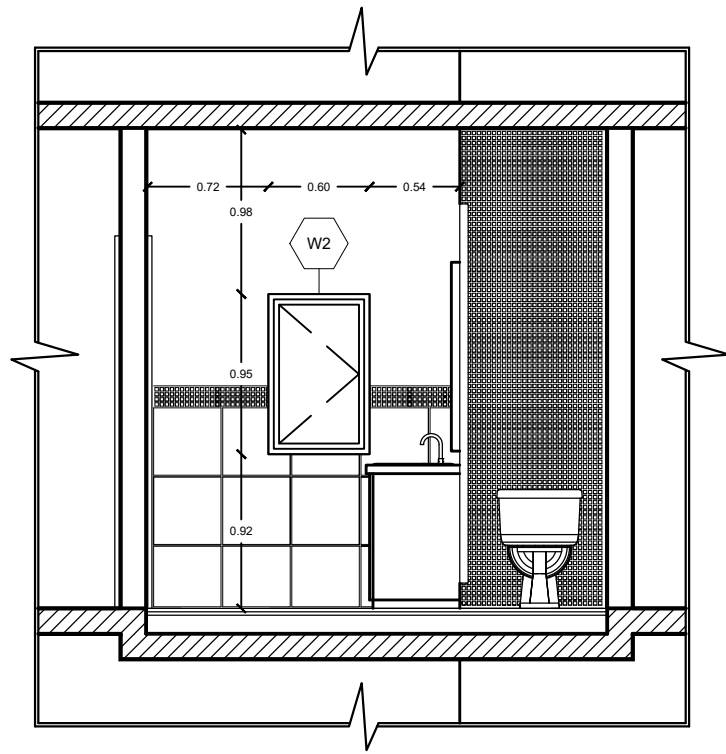
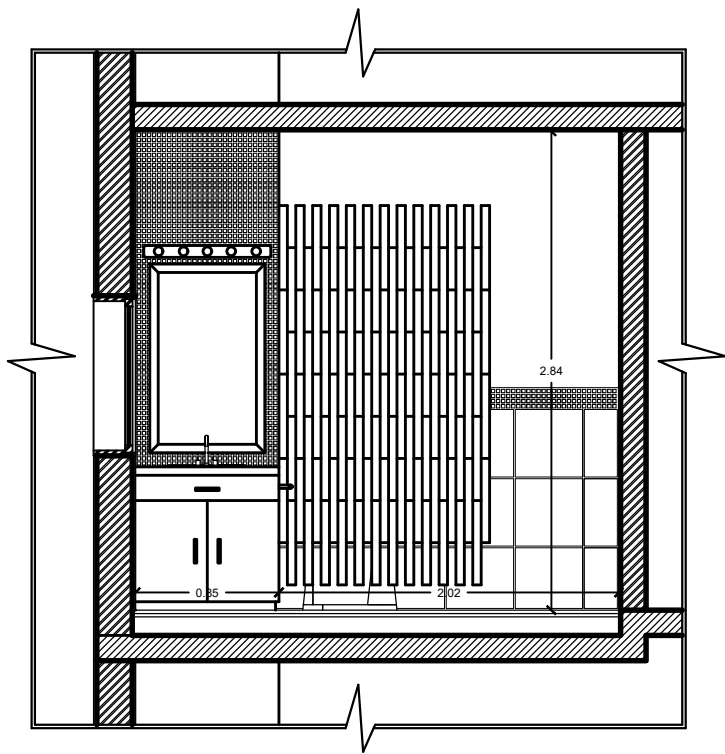
Plumbing Plan



Ceiling & Lighting Plan



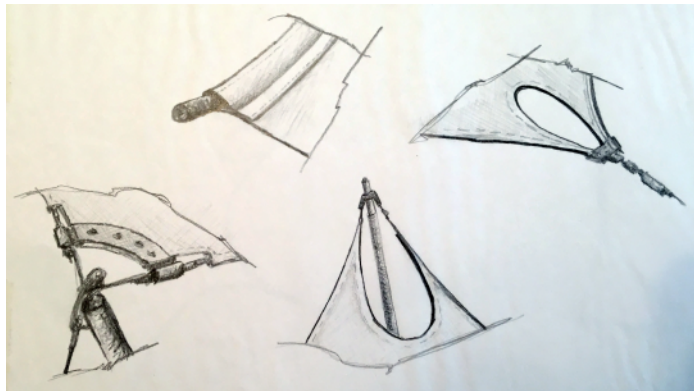
Equipment & Accessories Plan



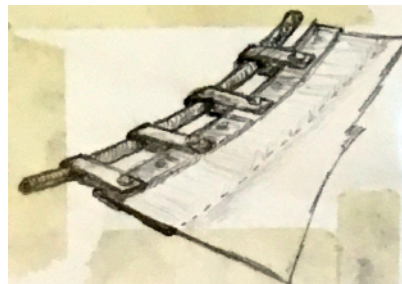
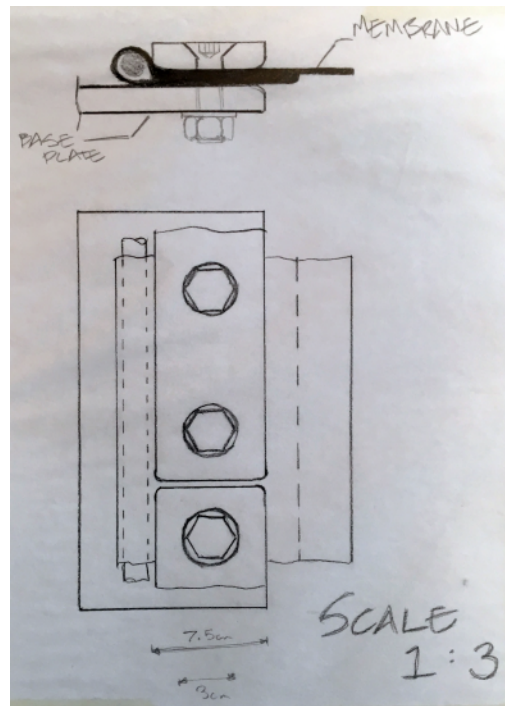
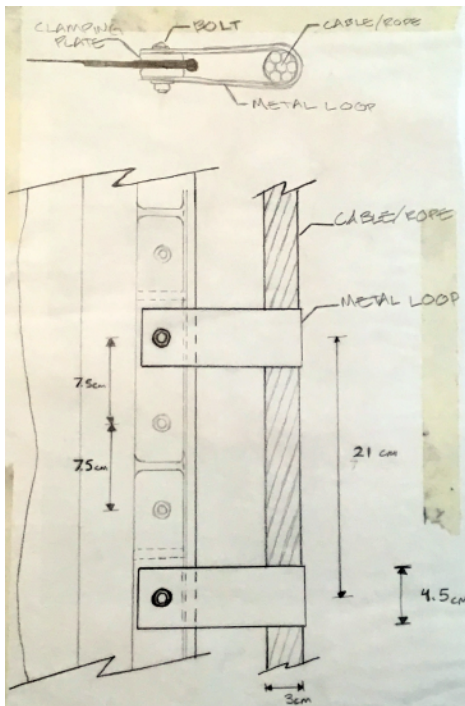
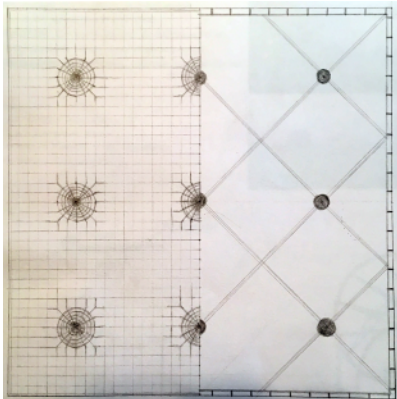
Interior Elevations

TENSILE CONNECTIONS CAIRO, EGYPT

Originally part of a third semester midterm submission, the following is a small selection of manual drawings of tensile structural connections. Each are taken from different projects, captioned for each detail drawn.



Atelier Van Der Meeren
Sterrebeek, Belgium



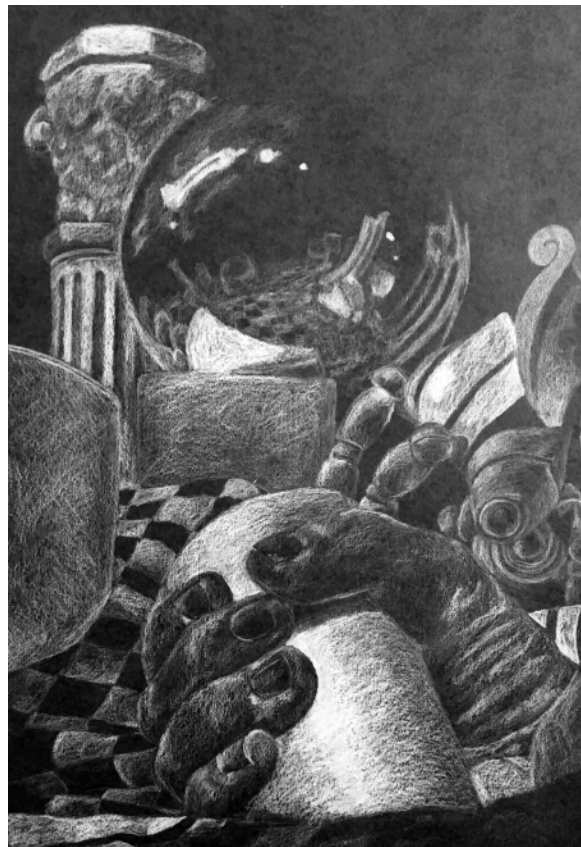
Venezuelan Pavilion Cafeteria
Hannover, Germany

Floating Pavilion in Groningen
Groningen, Netherlands

PERSONAL ARTWORK

ALEXANDRIA, EGYPT

The following pieces of art range from academic work to personal explorations. This small selection presents a portion of the range of media that I have explored and my manual drawing ability.



White color pencil on black paper



Oil Pastel



Charcoal



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guirguis.m@husky.neu.edu

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